

## ABSTRACT

The invention relates to a method for transparently exchanging data packets with a packet-oriented network, via which a number of network elements and a network node device are connected based on a common access method. The network elements are allocated unique local addresses only within the network. The network node device connects the packet-oriented network to an external device based on a point-to-point protocol and performs an address conversion of the address of a network element, said address being allocated within the packet-oriented network, into an address valid for the external device. A verification of message header entries of the data packets exchanged between the external device and the network element permits the establishment of a temporary transparent connection of the network element to the external device in the event an entry is detected that characterizes an expanded point-to-point protocol, e.g. PPPoE, whereby the address newly allocated by the external device is transmitted to the external device without address conversion.